

REMARKS

Claims 2–9 and 11-19 are pending in the application, claims 1 and 10 having been cancelled and claims 18 and 19 having been added herein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

SPECIFICATION

The specification and in particular the title stands objected to for certain informalities. Applicants have amended the title as detailed above. Therefore, reconsideration and withdrawal of this objection are respectfully requested.

CLAIM OBJECTIONS

The claims stand rejected to for certain informalities. The Examiner has noted that the term “connection” in claims 1 – 8, line 1 should be changed to “connector” and that the term “spring” in claims 1 – 8, line 3 should be changed to “contact spring”. Applicants note that the claims have been amended per the Examiner’s suggestions.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 4, 8, 9, 10, 11, 13 and 17 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Swearingen et al. (U.S. Pat. No. 2004/0003498)¹. This rejection is respectfully traversed.

¹ The Office Action inadvertently identified the cited reference as 2004/0003398 but the PTO-892 correctly identified the cited reference as 2004/0003498.

At the outset, Applicants note that the present invention provides an electrical connector for shielded cables (i.e., cables having a conductor with a terminal end and shielding to inhibit electromagnetic interference (EMI)). Thus, connectors of this type must provide a path of electrical continuity for the shielding while maintaining electrical isolation between the connector and the terminal end of the cable. In this regard, claims 18 and 19 recite a contact spring having a fixed portion interposed between a spacer block and a housing and a resilient portion extending into the bore of the spacer block and adapted to provide electrical continuity between the shielding of a cable and the housing. Claims 18 and 19 also recite a terminal receiving region which is electrically isolated from the housing.

In contrast, Swearingen discloses an electrical connector for non-shielded cables. In this regard, Applicants respectfully disagree with the Examiner's statements that Swearingen shows "an electrical connector for a shielded cable ... [having] a central conductor surrounded by an insulating layer surrounded by an shielding layer surrounded by another insulating layer" and "a spacer block of non-conductive material." See, Office Action, para. 4. The electrical connector includes a blank (20) that is rolled into a cylinder and that has tabs (26) extending from ends thereof. A cylindrical sleeve (28) is slipped over the cylindrical blank and the tabs at each end are bent back over the sleeve to form a barrel socket (56). The barrel socket is then inserted into the cylindrical portion (60) of a holder (62). A pin (80) inserted into the barrel socket engages the strips (24) of the blank such that electrical continuity is provided with the holder via the blank and the sleeve.

Applicants submit that Swearingen fails to teach or suggest a contact spring having a fixed portion interposed between the spacer block and the housing and a resilient portion extending into the spacer block bore to provide electrical continuity with the housing. Furthermore, Swearingen fails to disclose or suggest a connector which electrical isolates the terminal end (i.e. the pin 80) and the contact (i.e., strips 24). Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Each of claims 4, 8, 10, 11, 13 and 17 have been amended to depend from one of claims 18 and 19, which define over the prior art, as discussed in detail above. Furthermore, with respect to claims 4 and 13, the Examiner's attention is directed to para. 0097 of Swearingen which describes "a close-fitting cylindrical sleeve 28 [being] slipped over the tube [20]." Because Swearingen describes a slip fit, Applicants submit that it fails to teach or suggest a contact spring with scrapes a non-conductive oxide layer from an internal surface of the housing. With respect to claims 8 and 17, nothing in the specification discloses or suggests that the sleeve (28) is non-conductive. In fact, the sleeve is illustrated as being made of metal (see, cross-sectional shading of element 28 in FIGS 5-6, 8 9-10, and 33) and the specification speaks of welding the tabs of the blank to the sleeve (see, para. 0016), all indicative that the sleeve is in fact conductive. As such, Applicants submit that Swearingen fails to teach or suggest an electrically non-conductive spacer block. Therefore, claims 4, 8, 11, 13 and 17 also define over the prior art, and reconsideration and withdrawal of the rejections are respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 2, 3, 5, 6, 7, 12, 14, 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Swearingen *et al.* (U.S. Pat. No. 2004/0003498).

Each of claims 2, 3, 5, 6, 7, 12, 14, 15 and 16 have been amended to depend directly or indirectly from one of claims 18 and 19, which define over the prior art, as discussed in detail above. Furthermore, while Official Notice has been taken that certain features of the claimed invention are well-known and widely used in the art or electrical connectors, the Examiner fails to provide any teaching or motivation to combine such features as set forth in these claims. For example, with respect to claims 5 and 14, the configuration of the connector disclosed in Swearingen may not be readily modified to accommodate a cover. Therefore, claims 2, 3, 5, 6, 7, 12, 14, 15 and 16 also define over the prior art, and reconsideration and withdrawal of the rejections are respectfully requested.


CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: June 14, 2005

By: 
David A. McClaughry
Reg. No. 37,885

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600